

Table R-15: 1990-2001 Key Source Tier 1 Analysis - Trend Assessment

IPCC Source Categories	Direct Greenhouse Gas	Base Year Estimate (Tg CO ₂ Eq.)	Current Year Estimate (Tg CO ₂ Eq.)	Trend Assessment	Percent Contribution to Trend	Cumulative Total
Mobile Combustion: Road & Other	CO ₂	1,244.98	1,538.66	0.02	18	18
CO ₂ Emissions from Stationary Combustion - Oil	CO ₂	669.99	671.62	0.01	12	30
CO ₂ Emissions from Stationary Combustion - Coal	CO ₂	1,697.29	1,993.78	0.01	11	40
CO ₂ Emissions from Stationary Combustion - Gas	CO ₂	976.63	1,168.23	0.01	9	49
Emissions from Substitutes for Ozone Depleting Substances	Several	0.94	63.65	0.01	9	58
Fugitive Emissions from Coal Mining and Handling	CH ₄	87.12	60.75	<0.01	5	63
CO ₂ Emissions from Iron and Steel Production	CO ₂	85.41	59.07	<0.01	5	68
CH ₄ Emissions from Solid Waste Disposal Sites	CH ₄	212.07	202.93	<0.01	5	73
SF ₆ Emissions from Electrical Equipment	SF ₆	32.10	15.32	<0.01	3	76
Fugitive Emissions from Natural Gas Operations	CH ₄	122.01	117.35	<0.01	3	79
HFC-23 Emissions from HCFC-22 Manufacture	HFCs	34.98	19.82	<0.01	3	82
CH ₄ Emissions from Enteric Fermentation in Domestic Livestock	CH ₄	117.85	114.82	<0.01	3	84
PFC Emissions from Aluminum Production	PFCs	18.11	4.13	<0.01	2	87
Mobile Combustion: Aviation	CO ₂	176.88	183.93	<0.01	2	89
N ₂ O Emissions from Adipic Acid Production	N ₂ O	15.20	4.92	<0.01	2	90
CO ₂ Emissions from Waste Incineration	CO ₂	14.07	26.91	<0.01	2	92
Fugitive Emissions from Oil Operations	CH ₄	27.49	21.23	<0.01	1	93
Indirect N ₂ O Emissions from Nitrogen Used in Agriculture	N ₂ O	73.83	77.73	<0.01	1	94
CO ₂ Emissions from Ammonia Production and Urea Application	CO ₂	19.31	16.59	<0.01	1	95
CO ₂ Emissions from Cement Production	CO ₂	33.28	41.36	<0.01	1	95
SF ₆ Emissions from Magnesium Production	SF ₆	5.37	2.53	<0.01	0	96
CH ₄ Emissions from Manure Management	CH ₄	31.28	38.85	<0.01	0	96
Mobile Combustion: Marine	CO ₂	48.60	58.28	<0.01	0	97
CO ₂ Emissions from Aluminum Production	CO ₂	6.31	4.11	<0.01	0	97
N ₂ O Emissions from Nitric Acid Production	N ₂ O	17.85	17.60	<0.01	0	98
PFC, HFC, and SF ₆ Emissions from Semiconductor Manufacture	SF ₆	2.86	5.51	<0.01	0	98
Direct N ₂ O Emissions from Agricultural Soils	N ₂ O	193.71	216.59	<0.01	0	98
Mobile Combustion: Road & Other	N ₂ O	48.56	52.65	<0.01	0	99
Non-CO ₂ Emissions from Stationary Combustion	CH ₄	8.14	7.41	<0.01	0	99
Mobile Combustion: Road & Other	CH ₄	4.73	4.08	<0.01	0	99
CH ₄ Emissions from Wastewater Handling	CH ₄	24.08	28.35	<0.01	0	99

CO ₂ Emissions from Natural Gas Flaring	CO ₂	5.51	5.18	<0.01	0	99
N ₂ O Emissions from Wastewater Handling	N ₂ O	12.71	15.30	<0.01	0	99
CO ₂ Emissions from Ferroalloys	CO ₂	1.98	1.33	<0.01	0	99
CO ₂ Emissions from Limestone and Dolomite Use	CO ₂	5.47	5.28	<0.01	0	100
CO ₂ Emissions from Soda Ash Manufacture and Consumption	CO ₂	4.14	4.15	<0.01	0	100
CH ₄ Emissions from Rice Production	CH ₄	7.12	7.64	<0.01	0	100
CO ₂ Emissions from Titanium Dioxide Production	CO ₂	1.31	1.86	<0.01	0	100
N ₂ O Emissions from Manure Management	N ₂ O	16.18	18.00	<0.01	0	100
CO ₂ Emissions from CO ₂ Consumption	CO ₂	0.90	1.26	<0.01	0	100
CH ₄ Emissions from Petrochemical Production	CH ₄	1.17	1.49	<0.01	0	100
CO ₂ Emissions from Lime Production	CO ₂	11.24	12.86	<0.01	0	100
Mobile Combustion: Aviation	N ₂ O	1.71	1.79	<0.01	0	100
CO ₂ Emissions from Stationary Combustion - Geothermal Energy	CO ₂	0.40	0.35	<0.01	0	100
Mobile Combustion: Marine	N ₂ O	0.36	0.31	<0.01	0	100
N ₂ O Emissions from Waste Incineration	N ₂ O	0.29	0.24	<0.01	0	100
N ₂ O Emissions from N ₂ O Product Usage	N ₂ O	4.30	4.79	<0.01	0	100
N ₂ O Emissions from Agricultural Residue Burning	N ₂ O	0.37	0.46	<0.01	0	100
Non-CO ₂ Emissions from Stationary Combustion	N ₂ O	12.52	14.18	<0.01	0	100
Mobile Combustion: Aviation	CH ₄	0.16	0.15	<0.01	0	100
CH ₄ Emissions from Silicon Carbide Production	CH ₄	0.03	0.01	<0.01	0	100
Mobile Combustion: Marine	CH ₄	0.07	0.06	<0.01	0	100
CH ₄ Emissions from Agricultural Residue Burning	CH ₄	0.68	0.76	<0.01	0	100
TOTAL		6,139.64	6,936.21	0.09	100.00	

Note: Sinks (e.g., LUCF, Landfill Carbon Storage) are not included in this analysis.